

**IN THE CLAMS:**

*This listing of claims will replace all prior versions and listings of claims in the application:*

**Listing of Claims:**

1-21 (Canceled).

22. (Previously Presented) A method of screening kidney function for the ability to fragment protein in a patient comprising:

- (a) generating at least one fragmentation profile for at least one protein from a urine sample obtained from the patient;
- (b) comparing said at least one fragmentation profile with a reference fragmentation profile for said at least one protein of a normal individual ; and
- (c) correlating a decrease in fragmentation of the at least one protein with decreased kidney function.

23. (Canceled).

24. (Canceled).

25. (Previously presented) The method of claim 22 wherein a decrease in fragmentation of the at least one protein is correlated to the presence of a disease or condition causing said decrease in fragmentation.

26. (Currently amended) The method of claim 25, wherein the disease is a kidney disease.

27. (Currently amended) The method of claim 22, wherein the decrease in fragmentation is a result of lysosomal dysfunction.

28. (Canceled).

29. (Currently amended) The method of claim 22, wherein the at least one fragmentation profile and reference fragmentation profile are determined in terms of fragment size and sequence.

30. (Canceled).

31. (Previously presented): The method of claim 22, wherein the fragmentation profile is generated and/or compared to a reference fragmentation profile using chromatography, electrophoresis, sedimentation, or mass spectroscopy; or combinations thereof.

32. (Previously presented): The method of claim 22, wherein the at least one protein is selected from the group consisting of albumin, globulin, ( $\alpha$ -globulin, ( $\alpha_1$ -globulin,  $\alpha_2$ -globulin),  $\beta$ -globulin  $\gamma$ -globulin), euglobulin, pseudoglobulin I and II, fibrinogen,  $\alpha_1$ acid glycoprotein, (orosomucoid),  $\alpha_1$ glycoprotein,  $\alpha_1$ lipoprotein, ceruloplasmin,  $\alpha_2$ 19S glycoprotein,  $\beta_1$  transferrin,  $\beta_1$  lipoprotein, immunoglobulins A, E, G, and M, lactate dehydrogenase, glucose oxidase, myoglobin, lysozyme, protein hormone, growth hormone, insulin, or parathyroid hormone.

33. (Currently Amended) The method of claim 25 wherein the disease or condition causing ~~renal complications~~ said decrease in fragmentation is bacterial infection, congenital defect, stones, allergy, or diabetes.

34. (Previously presented) The method of claim 22 wherein the at least one protein is albumin.

35. (Previously presented) The method of claim 22 wherein the at least one protein is IgG.

36. (Previously presented) The method of claim 22 wherein the patient has diabetes mellitus and the at least one protein is albumin.

37. (Previously presented) The method of claim 22 wherein the at least one fragmentation profile and the reference protein profile are generated with High Performance Liquid Chromatography.

38. (Previously presented) The method of claim 22 wherein the patient has diabetes and exhibits normoalbuminuria and the at least one protein is albumin.